

Alberta Waterfowl Crop Damage Prevention Program, 2009

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Alberta Waterfowl Crop Damage Prevention Program, 2009

Velma Hudson
Alberta Conservation Association
#316, 5025-49 Ave.
St. Paul, Alberta, Canada
T0A 3A4



Report Editors

DOUG MANZER
Alberta Conservation Association
Box 1139, Provincial Building
Blairmore, AB T0K 0E0

GLENDA SAMUELSON
2123 Crocus Road NW
Calgary, AB T2L 0Z7

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Alberta Conservation Association
#101 - 9 Chippewa Rd
Sherwood Park AB T8A 6J7
Toll Free: 1-877-969-9091
Tel: (780) 410-1998
Fax: (780) 464-0990
Email: info@ab-conservation.com
Website: www.ab-conservation.com

EXECUTIVE SUMMARY

The Waterfowl Crop Damage Prevention Program (WCDPP) provides assistance to Alberta grain producers in reducing or preventing damage to cereal crops caused by waterfowl during the fall migration period. Damage prevention is accomplished through 1) the provision of alternate feed for waterfowl at feeding stations and lure crops, 2) the provision of waterfowl scare cannons available for producers to borrow free of charge, 3) waterfowl scaring advice available through print media, internet and WCDPP coordinators, and 4) the optional sharing of contact information with waterfowl hunters.

Alberta Conservation Association (ACA), Environment Canada (EC) and Alberta Sustainable Resource Development (ASRD) collaboratively plan the WCDPP. ACA delivers program services while program funding has traditionally been cost-shared between ACA and EC. For the 2009 fall migration period, EC was unable to commit to cost-sharing of the WCDPP prior to implementation of program activities. Consequently, ACA delivered a modified program that did not operate waterfowl feeding stations but did provide the other services as listed above.

Scare cannons were available for producers to borrow at 45 locations throughout the white zone (agricultural region) of Alberta. Scare cannon distribution centres operated for an average of 76 days, with 118 cannons loaned to 48 producers for use on at least 81 different quarter sections of land. Forty-eight percent of producers who borrowed scare cannons allowed their contact information to be provided to waterfowl hunters. Scare cannon request information was available through weekly updates on a WCDPP web page.

Key words: Alberta, waterfowl, crop damage prevention, cereal grain, ducks, geese, cranes.

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1.0 INTRODUCTION

1.1 General introduction

Alberta is a major nesting and staging area for many species of waterfowl, including ducks, geese and cranes (Salt and Salt 1976; Poston et al. 1990; Federation of Alberta Naturalists 1992). Waterfowl are opportunistic feeders and their fall migration period tends to coincide with the harvest season for cereal grains in Alberta (Federation of Alberta Naturalists 1992), thereby creating the potential for waterfowl damage to unharvested grain crops. Most grain producers tolerate a certain amount of waterfowl damage to crops; however, when damage becomes severe or recurrent, producers may become intolerant of waterfowl and the damage they cause (Renewable Resources Consulting Services 1969). Consequently, producers may become less receptive to programs aimed at enhancing or protecting waterfowl and their habitat. To address potential concerns over damage from waterfowl, compensation and prevention programs have been functioning in the province since 1961.

1.2 Waterfowl crop damage compensation

In 1961, the Government of Alberta established the Wildlife Damage Fund, funded by hunting license fees, to provide compensation for crop damage caused by waterfowl to Alberta grain producers without the payment of crop insurance premiums. Initially, the compensation payable was the lesser of \$15/acre or 50% of the value of the lost crop. In 1973, the rate was increased to the lesser of \$25/acre or 75% of the value of the lost crop. The rate was adjusted again in 1978, to the lesser of \$50/acre or 75% of the value of the lost crop. From 1983 to 1990, the per acre rate was adjusted annually while the maximum payment remained at 75% of the value of the lost crop. The signing of the North American Waterfowl Management Plan in the late 1980s increased the need for an improved compensation program. Discussions between various governments, producers, and crop insurance agencies culminated in the development of a compensation program that paid a flat rate of 80% of the value of the crops lost to waterfowl damage from 1991 to 1999. In 2000, waterfowl damage compensation was changed to the present rate of 100% of the commercial value of the damaged crop (Ken Lungle, Alberta Sustainable Resource Development (ASRD), pers. comm.).

1.3 Waterfowl crop damage prevention

In 1970, an experimental waterfowl damage prevention program was initiated by the Alberta Government in the Grande Prairie area (Burgess 1973). The purpose of this program was to determine if a waterfowl scaring program in combination with the provision of feeding sites would prevent or minimize crop damage. Ultimately, the goal was to determine whether the prevention program would be economically efficient, by preventing crop damage instead of making compensation payments after the damage occurred. With the success of the experimental program, a waterfowl damage prevention program was expanded into areas of the province where crop losses had been both severe and recurrent.

Currently, the Waterfowl Crop Damage Prevention Program (WCDPP) delivers damage prevention assistance throughout the agricultural region of the province (the white zone). Mallards (*Anas platyrhynchos*), northern pintails (*Anas acuta*), Canada geese (*Branta canadensis*), white-fronted geese (*Anser albifrons*), snow geese (*Chen caerulescens*), and sandhill cranes (*Grus canadensis*) are the primary waterfowl species targeted by the WCDPP.

Alberta Conservation Association (ACA), Environment Canada (EC) and ASRD collaboratively plan the WCDPP. The ACA has delivered the WCDPP since 1997, and has shared program costs with EC for most years. For the 2009 fall migration, EC was unable to commit to cost-sharing the program prior to implementation of activities; therefore, ACA delivered a modified program that did not operate waterfowl feeding stations. In past years the WCDPP has operated twelve traditional feeding stations and one lure crop throughout the province.

In 2009, the WCDPP provided 1) waterfowl scare cannons available for producers to borrow free of charge, 2) waterfowl scaring advice available through print media, internet and WCDPP coordinators, and 3) the optional sharing of contact information with waterfowl hunters.

2.0 STUDY AREA

The WCDPP is delivered throughout the white zone (agricultural region) of Alberta (Figure 1).

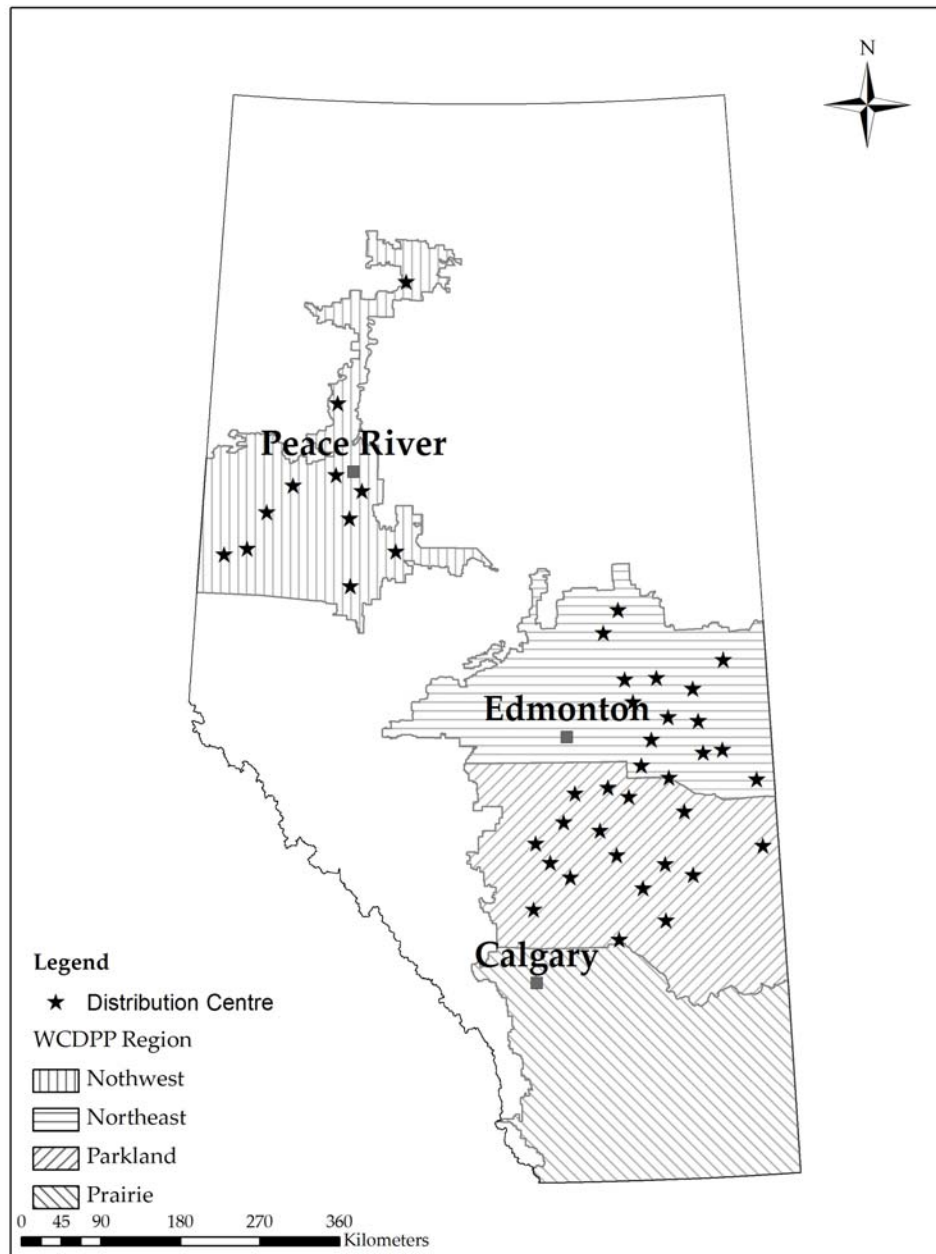


Figure 1. Map of WCDPP 2009 operational areas showing regions and distribution centres.

3.0 MATERIALS AND METHODS

3.1 Regional organization

Four regional coordinators, one for each of the Northwest, Northeast, Parkland, and Prairie regions (Figure 1), deliver the WCDPP under the direction of a provincial coordinator.

3.2 Scare cannon distribution centres

Scare cannon distribution centres are located in local businesses, as well as ACA and ASRD offices (Figure 1). Cannons may be borrowed, free of charge, by producers with waterfowl damage problems. The distribution centre operator collects a damage deposit which is returned to the borrower if the cannon is returned in good condition. Producers are asked the location of waterfowl damaged land, crop type, waterfowl species causing damage, and whether or not they will permit their contact information to be provided to interested waterfowl hunters. Regional WCDPP coordinators collect this information weekly from distribution centres. In 2009, distribution centres were paid \$300 for storing cannons for the season plus \$10 for each cannon distributed. ASRD offices that served as distribution centres provided this service to ACA free of charge.

3.3 WCDPP web page

The WCDPP used a website to assist waterfowl hunters in locating potential areas of waterfowl concentrations and to assist producers with waterfowl crop damage prevention. To prevent crop damage, producers could allow hunting in their fields as hunting typically frightens waterfowl. Feedback from producers suggests they often do not know how to contact waterfowl hunters, while hunters are looking for access to land with waterfowl concentrations.

The web page contains information on the WCDPP, a downloadable fact sheet on waterfowl crop damage prevention strategies, and a link to a provincial map which visually displays the number of requests received weekly from scare cannon distribution centres. The number of requests for assistance can indicate areas of waterfowl concentration. The viewer is able to click on a region of interest and view more detailed

information on the number of requests for scare cannons received in the past week plus the total number of requests based on individual reporting areas. Contact information for regional coordinators is listed, and viewers are encouraged to contact the appropriate coordinator for contact information of the producers willing to discuss hunting in areas of crop damage. Information on the web page was updated weekly from 17 August to 23 October in 2009.

4.0 RESULTS

4.1 Provision of alternate feed

We informed ASRD (Provincial Bird Game Specialist and District Fish and Wildlife offices), Ducks Unlimited Canada, Bow River Irrigation District and Raymond Irrigation District about the suspension of feeding operations in 2009. WCDPP coordinators did not receive any inquiries from the public regarding suspension of feeding activities in 2009.

We have operated a single waterfowl lure crop at Prouty Lake on an ACA conservation site for many years but the lure crop has received sporadic use by waterfowl. In 2009, we contracted a local producer to convert the cultivated area to permanent cover. This area will now be managed as upland wildlife habitat by the ACA Land Management team.

4.2 Scare cannon distribution centres

Scare cannons were available at 34 contracted businesses, nine ASRD district offices, and two ACA offices for a total of 45 locations. Detailed information on distribution centre use is contained in Appendix 1. The distribution centres operated for an average of 76 days, beginning mid to late August and finishing in mid October through November depending on the area. One-hundred-and-eighteen cannons were loaned out to 48 producers for use on at least 81 different quarter sections of land. Forty-eight percent of the producers indicated they would allow their contact information to be provided to waterfowl hunters.

4.3 WCDPP web page

Our waterfowl web page was viewed 294 times and had 175 unique visits between 1 August and 13 December 2009. Eight waterfowl hunters contacted WCDPP coordinators directly through the web page and were provided with additional information including the contact information of producers willing to be contacted regarding hunting.

4.4 Program expenditures

The program expenditures represent the total amount of funds spent on the WCDPP between 1 April 2009 and 31 March 2010. The total WCDPP program expenditure amounted to \$23,700 excluding staff salaries (Table 1). Lower than anticipated costs can be attributed to good harvest weather, allowing producers to harvest their crops quickly and thereby reduce the opportunity for waterfowl damage. The relatively low use of scare cannons from distribution centres reduced the contract costs for this service.

Table 1. Alberta WCDPP expenditures for the 2009-2010 budget year.

	Proposed budget	Actual expenditure
Contracted services	\$23,500	\$11,560
Equipment repair and maintenance	6,300	739
Freight and postage	3,000	8
Telephone	1,350	580
Vehicle operation	11,775	8,522
Materials and supplies	6,000	36
Landowner agreements	450	814
Office supplies	900	0
Conferences	1,475	740
Travel expenses	2,000	701
Total	\$56,750	\$23,700

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6.0 APPENDICES

Appendix 1. A summary of the waterfowl scare cannon service provided during the 2009 WCDPP in Alberta. Distributing agents:

C = contracted business, ACA = ACA office, ASRD = ASRD office.

Location of distribution centre	Distributing agent	Start date of centre	End date of centre	Duration of centre (days)	Number of cannons borrowed	Number of targeted quarters	Number of borrowing producers	Producers who allowed their contact information to be shared with hunters
Andrew	C	19-Aug	4-Nov	78	3	n/a	1	1
Atmore	C	21-Sep	25-Nov	66	0	0	0	n/a
Bashaw	C	12-Aug	28-Oct	77	5	4	3	2
Bawlf	C	17-Aug	21-Oct	65	3	1	1	1
Bonnyville	C	2-Sep	4-Nov	64	0	0	0	n/a
Boyle	C	16-Sep	25-Nov	71	13	6	4	0
Byemore	C	18-Aug	26-Oct	69	0	0	0	n/a
Camrose	C	20-Aug	21-Oct	62	0	0	0	n/a
Camrose	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Castor	C	18-Aug	26-Oct	69	0	0	0	n/a
Cornation	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Drumheller	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Fairview	C	15-Sep	2-Nov	48	7	6	3	2
Girouxville	C	21-Aug	29-Oct	69	5	5	2	1
Grimshaw	C	21-Aug	29-Oct	69	4	2	1	0
Hanna	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
High Prairie	C	24-Aug	29-Oct	66	16	7	4	4
Holden	C	2-Sep	9-Nov	69	0	0	0	n/a

Appendix 1. Continued

Location of distribution centre	Distributing agent	Start date of centre	End date of centre	Duration of centre (days)	Number of cannons borrowed	Number of targeted quarters	Number of borrowing producers	Producers who allowed their contact information to be shared with hunters
Hythe	C	25-Aug	27-Nov	94	2	1	1	1
La Crete	C	18-Sep	30-Oct	42	1	1	1	1
La Glace	C	25-Aug	3-Nov	70	1	1	1	0
Lougheed	C	13-Aug	22-Oct	70	0	0	0	n/a
Manning	C	31-Aug	2-Nov	64	2	2	2	0
Mannville	C	14-Aug	9-Nov	88	0	0	0	n/a
Myrnam	C	18-Aug	25-Nov	100	21	10	6	0
Nampa	C	24-Aug	29-Oct	66	0	0	0	n/a
Olds	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Paradise Valley	C	14-Aug	26-Nov	105	2	2	2	1
Pine Lake	C	21-Aug	23-Oct	63	1	1	1	0
Ponoka	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Provost	C	20-Aug	22-Oct	63	2	8	1	1
Provost	ASRD	1-Aug	31-Oct	90	0	0	0	n/a
Red Deer	ACA	year round			0	0	0	n/a
Smoky Lake	C	19-Aug	4-Nov	78	5	3	2	0
Spirit River	C	1-Sep	3-Nov	64	0	0	0	n/a
St. Paul	ACA	year round			7	5	3	2
Stettler	C	18-Aug	28-Oct	71	0	0	0	n/a
Stettler	ASRD	1-Aug	31-Oct	90	0	0	0	n/a

Appendix 1. Continued

Location of distribution centre	Distributing agent	Start date of centre	End date of centre	Duration of centre (days)	Number of cannons borrowed	Number of targeted quarters	Number of borrowing producers	Producers who allowed their contact information to be shared with hunters
Two Hills	C	18-Aug	26-Nov	101	4	3	2	2
Valleyview	C	24-Aug	27-Oct	64	0	0	0	n/a
Vegreville	C	18-Aug	26-Nov	101	13	12	6	4
Vermilion	C	18-Aug	9-Nov	84	0	0	0	n/a
Viking	C	14-Aug	9-Nov	88	0	0	0	n/a
Vilna	C	16-Sep	4-Nov	50	0	0	0	n/a
Wetaskiwin	ASRD	1-Aug	31-Oct	90	1	1	1	0
Total					118	81	48	23

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